

CRITICAL MINERALS ASSOCIATION AUSTRALIA

APRIL 2024

- Critical minerals funding helps deliver future made in Australia
- Opinion piece: Where Australia is getting it wrong on critical minerals
- Indigenous Peoples call for respect for their rights, participation & shared prosperity in clean energy transition

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Newsletter



APRIL 2024

MONTHLY NEWSLETTER

Welcome to our Critical Minerals Association Australia monthly newsletter & updates on the critical minerals space.

CMA AUSTRALIA NEWS

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INTERNATIONAL DEVELOPMENTS

- India seeks to secure critical mineral resources in race for lithium
- European firms, banks must boost investment in critical minerals, official says
- What's next in \$60b BHP-Anglo mega-deal?
- UN-led panel aims to tackle abuses linked to mining for 'critical minerals'
- Indigenous Peoples call for respect for their rights, participation & shared prosperity in clean energy transition
- Copper hits highest price since 2023
- Japan investigates anti-dumping into Chinese graphite electrodes
- What's next for Australian lithium?
- Hancock Prospecting purchases stake in US Rare Earth producer MP Materials
- African critical minerals output could reach \$2 trillion by 2050

BIG PICTURE THINKING

- April 1: Stellar locations to mine antimony and tungsten
- \$270BN funding gap for critical minerals threatens energy transition, warns UNCTAD
- How to Develop a Critical Minerals Project: Our Top 5 Tips
- How will the booming semiconductor market affect critical materials?

CALENDAR OF EVENTS 2024

To open articles in a new tab:



Critical Minerals Association Australia



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CMA AUSTRALIA NEWS

New Members

The CMAA would like to welcome our newest members to the Association: [Minviro](#) and [Southern Cross Gold](#).



"Minviro Australia Pty Ltd is an innovative environmental firm specialising in life cycle assessment (LCA) and carbon footprint analysis for businesses across various industries. Utilising advanced software and expertise, Minviro aids companies in assessing and reducing their environmental impact throughout product life cycles, from raw material extraction to end-of-life disposal. Specialising across all raw materials, we partner with developers and producers to improve sustainability, enhance efficiency, and meet regulatory requirements, ultimately contributing to a more sustainable future for businesses and the environment.

As the battery raw material market rapidly evolves, minimising the environmental impacts of products feeding the green energy transition is prevalent. This will support the differentiation in the price of clean battery raw materials within the current supply chain and drive positive change in sustainable sourcing practices.

Minviro Australia is thrilled to be collaborating with CMAA to broaden our network, discuss actionable solutions to real-time sustainability issues, and develop strategic partnerships."



Southern Cross Gold Ltd (SXG) is a fully funded and permitted exploration company focussed on high grade epizonal gold and antimony in Victoria.

Our 100% owned Sunday Creek project is one of the best new gold discoveries globally and is shaping up to be Australia's largest deposit of antimony that sits on the critical minerals lists of nearly all western countries such as Australia, Japan, India, the US, the EU, Canada and the UK.

Headline results across the 1,200 m strike and down to over 1,000 m vertical depth at the main drill area include 404.4 m @ 5.6 g/t AuEq (uncut) from SDDSC077B, 331.5 m @ 6.8 g/t Au from 413.6 m (uncut) from SDDSC082 and 455.3 m @ 7.2 g/t Au (uncut) from 335.0 m from SDDSC107. Mineralisation remains open at depth and along strike.

The drilling area at Sunday Creek has tested <15% of the 11km long mineralised trend at the property. The first ever drill program at regional prospects up to 8 km from the main drill area hit mineralisation and demonstrates the entire trend and beyond at Sunday Creek is highly prospective for future significant gold and antimony discoveries.

We are closely engaged with all stakeholders in the community, government, industry and academia to ensure that Sunday Creek becomes an important new asset that contributes wealth to shareholders and stakeholders alike as well as becoming a major new western supplier of antimony to increase western self-sufficiency in the metal.



Australia-Japan Energy Partnership Conference

The CMAA was delighted to chair a Critical Minerals Roundtable as part of the Australia Japan Business Cooperation Committee's Energy Transition Conference in Adelaide on 11-12 April 2024. The Roundtable followed on from a first 2023 meeting in Melbourne, bringing together key stakeholders from Japan and Australia to discuss the key issues to promote greater Japan-Australia collaboration in critical minerals supply chains.

April 11-12



South Australian Critical Minerals

In South Australia, on 10 April 2024, the CMAA also facilitated a meeting of South Australian critical minerals producers, the South Australian Government and the Critical Minerals office, to discuss South Australia's critical minerals industry, strategy and path forward. Photos for use are attached.

April 10



Calling for member input

The CMAA is calling for input from members on the current stakeholder consultation process about a possible FTA between Australia and the Gulf Cooperation Council. Details about the negotiations can be found **HERE**.



Paydirt Battery Mineral Conference

Perth, AU | 16th - 17th of April

CMAA attended the Paydirt Battery Minerals Conference in Perth on 16-17 April, where MD, Namali Mackay spoke on key critical mineral issues, chaired the international session and was asked to give a vote of thanks to US Ambassador, Caroline Kennedy.



Caroline Kennedy, US Ambassador to Australia; Namali Mackay, MD, CMA Australia, Allison Britt, Director Geoscience Australia and Maria Rennie, UK Consul General, Perth.



Namali Mackay, MD, CMAA speaks on panel: Critical minerals and sustainability – Burden or bonus?

CMAA Member, **GHD**, attended the Paydirt Battery Minerals Conference in Perth. Mike Nolan and Rohan Watts shared a few thoughts with us...

The Battery Minerals Conference in Perth, focused on the burgeoning demand for critical minerals essential for the clean technology sector. Key themes included the exponential growth forecasted for minerals like lithium, nickel, graphite, and cobalt, driven by the transition to a low-carbon economy. The conference was very useful for GHD as it reinforced Australia's strategic role in the global battery industry, discussing market outlooks, project development, and new government policies aimed at fostering the critical minerals industry. It served as a crucial platform for stakeholders from industry, academia, and government to engage in in-depth discussions about the future of battery technology and the development of the critical minerals sector. The paper delivered by Phil Baker drew wide acclaim as thought provoking in the critical role infrastructure plays in enabling the supply chains to work effectively. Another highlight was the address from USA Ambassador to Australia Caroline Kennedy who reinforced the strength of the alliance between USA & Australia with specific reference to the USA appetite in Australian projects to secure supply chains for domestic manufacturing.



Phil Baker, Principal and Senior Executive Advisor, GHD speaks on Paydirt panel.

SRK, shares their following article with us for this month's newsletter

Don't Lose It...Reuse It...

by Rob Bowell, Corporate Consultant (Geochemistry and Geometallurgy), SRK Consulting (UK)

The mining industry continues to face many challenges due to its potential environmental impacts. These challenges are becoming harder to overcome with growing social awareness, increasing regulatory pressure on suitable disposal options and the scarcity of available spaces for long term waste disposal. In addition there is growing pressure on the application of more sustainable approaches in mining.

Historical mining waste and even process waste from many modern processes has potential to contain hidden "gems" of value that with a little effort could be unlocked. The different types of mine waste can include tailings, waste rock or process residues. During the life cycle of a mining operation, the various waste streams will show large variation both from different areas of the operation and over time and the most applicable methods of management may therefore also change over time. In addition, the re-evaluation of mine waste in light of a "circular economy" also seeks to find new uses for old materials, based on the idea that "mine waste is a commodity without a current use".

SRK has been involved in several projects that have identified efficient and effective solutions prior to mining commencing in operation and even for closed and abandoned sites. Typically such approaches require cross-disciplinary skills to valorise waste materials into market required resources. Some general information is given below.

A common issue lies with flotation tailings where recovery of fine-grained mineral particles became occluded originally by non-responsive gangue minerals during processing. Consequently, metal value was encapsulated within the waste and lost. A good example is the Wheal Maid tailings impoundment in Cornwall where historical mineral processing has left a legacy of heavily contaminated mine waste with high levels of metals in mine water. Copper, zinc, tin, silver, germanium and antimony as well as problematic metal(loid)s such as arsenic and lead occur in mine waste at concentrations similar to many modern mines (up to 3% copper and 2% zinc). These metals are associated with waste pyrite that could be recovered for sulfuric acid production and as inclusions of sulfide minerals in quartz. Recovery of this material may well involve regrinding the material or using modern sorters to selectively concentrate such phases and then process by conventional methods.

In some cases, the value is a surprise, or historically was not assessed. For example, in South East USA there are literally millions of tons of phosphogypsum mine waste that contain rare earth elements. These can be removed by regrind and leaching with an acidic leach. In other cases, the commodity has only recently been identified, for example the presence of high scandium concentrations in bauxite process residue, red muds (Figure 1).

In all these examples the critical link is achieving a better understanding of chemistry and mineralogy of the material to be processed and using this information to develop more sustainable mineral resourced.



Phosphogypsum stack, Florida (USEPA)



Figure 1: Red mud discharge, bauxite processing facility

AUSTRALIAN NEWS

Albanese makes manufacturing his future

As campaign slogans go, Anthony Albanese is confident he's on a political winner. The term "Made in Australia" has always had deep community appeal – even as most local manufacturing jobs have steadily, inevitably dwindled...

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Australian Financial Review (Subscription Required) | 11 Apr 2024

What is mineral sands mining and why are farmers wary of its potential to lead us 'out of climate crisis'?

Mineral sands are used to make everything from electric cars and smartphones to sunscreen. As Australia enters what Trade Minister Don Farrell is calling a "golden age in critical minerals development", mining companies are eyeing vast stretches of farmland in Victoria and New South Wales for mineral sand mines...

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ABC News | 22 Apr 2024

Rinehart raises Lynas stake with \$49m injection

Gina Rinehart's Hancock Prospecting has snapped up a 5.82 per cent stake in Lynas Rare Earths for a cool \$49 million, the latest in a string of rare earths moves by the magnate...

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Australian Mining | 17 Apr 2024

Where Australia is getting it wrong on critical minerals

Australia's critical minerals strategy is selling itself and its allies short, according to a new report by the Australian Strategic Policy Institute...

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Australian Financial Review | 17 Apr 2024

Australia's critical minerals strategy needs more economic reality and less geopolitical wishful thinking

Canberra is copping heat over its critical minerals strategy. This is the sector that Treasurer Jim Chalmers, has described as the "generational, defining opportunity for our country ... one we cannot afford to miss"...

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The Australian Business Review | 28 Apr 2024

Nickel miner axes 530 jobs as pressure builds for budget bailout

The Albanese government is under more pressure to come up with a bailout package for the nickel industry in the May budget after the axe fell on another 530 workers on Monday...

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Australian Financial Review | 29 Apr 2024

Australian manufacturing poster child Tritium fails days after Qenos

A Nasdaq-listed electric vehicle fast-charger company hailed first as a Queensland success story and then as a justification for government subsidies is the second major Australian manufacturer to collapse this week.

Tritium, founded in 2001 and worth about \$2 billion when it went public at the peak of the market for loss-making technology companies in early 2022, went into administration on Friday...

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Australian Financial Review | 19 Apr 2024



Photo source: agnormark/stock.adobe.com

AUSTRALIAN GOVERNMENT NEWS

A future made in Australia

I begin by acknowledging the traditional owners of the land on which we meet and I pay my respects to their elders past, present and emerging. I want to acknowledge all my colleagues who are here today.

I'm delighted to be back at the Queensland Media Club to talk about our Government's vision for a future made in Australia...

[Read More](#)

Australian Government - Prime Minister of Australia | 11 Apr 2024

Critical minerals funding helps deliver future made in Australia

The Albanese Government will support a further two major critical minerals projects in Queensland and South Australia, helping deliver the building blocks for a future made in Australia while creating hundreds of jobs and opportunities.

The Government will provide \$400 million in new loans to Australian company Alpha HPA to deliver Australia's first high-purity alumina processing facility in Queensland...

[Read More](#)

Australian Government - Minister for Northern Australia | 17 Apr 2024

Queensland critical minerals boosted by millions

Queensland is set to welcome a host of new critical minerals projects thanks to millions in funding from the Queensland Government. The funding comes from a \$2.67 million Mining Equipment, Technology and Services (METS) Collaborative Project Fund and the latest round of the \$4.6 million Collaborative Exploration Initiative (CEI)...

[Read More](#)

Australian Mining | 08 Apr 2024

Opinion piece: Future Made in Australia will drive our place in new global economy

A big focus of meetings with ministerial counterparts, central bank governors and the key global economic institutions in Washington DC this week will be the economic uncertainty that comes from rising inflation in the United States, a slowdown in China, recessions recorded in comparable countries and the impacts of 2 serious conflicts in the Middle East and Europe...

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Australian Government - Treasury Portfolio | 17 Apr 2024

INTERNATIONAL DEVELOPMENTS

India seeks to secure critical mineral resources in race for lithium

India is seeking to shore up its access to critical minerals such as lithium, a government official said, as the world's most populous country rushes to catch up with rivals including China in the race to build next-generation energy supply chains...

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Financial Times (Subscription Required) | 23 Apr 2024

European firms, banks must boost investment in critical minerals, official says

European firms such as automakers and financial institutions need to step up investment in critical minerals for the region to develop domestic sources of the key raw materials for the energy transition, the head of an EU-funded organisation said...

[Read More](#)

Reuters | 24 Apr 2024

What's next in \$60b BHP-Anglo mega-deal?

BHP has confirmed a possible \$60 billion acquisition of mining giant Anglo American. What does such a deal mean for the sector? Australian Mining investigates.

The announcement: The frenzy began yesterday morning when Anglo released a statement saying it had received an "unsolicited, non-binding and highly conditional combination proposal" from BHP...

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Australian Mining | 26 Apr 2024

UN-led panel aims to tackle abuses linked to mining for 'critical minerals'

A UN-led panel of nearly 100 countries is to draw up new guidelines to prevent some of the environmental damage and human rights abuses associated with mining for "critical minerals".

Mining for some of the key raw materials used in low-carbon technology, such as solar panels and electric vehicles, has been associated with human rights abuses, child labour and violence, as well as grave environmental damage...

[Read More](#)

The Guardian | 27 Apr 2024

Indigenous Peoples call for respect for their rights, participation & shared prosperity in clean energy transition

Representatives met to discuss address the pressing issues surrounding a just energy transition in a first-of-its-kind conference ahead of this week's UN Permanent Forum on Indigenous Issues (UNPFII), organised from 12 – 14 April 2024 by Business & Human Rights Resource Centre, Indigenous Peoples Rights International (IPRI) and Right Energy Partnership with Indigenous Peoples (REP)...

[Read More](#)

Business & Human Rights Resource Centre | 18 Apr 2024



Photo Source: Business & Human Rights Resource Centre

Copper hits highest price since 2023

Copper prices surged by 1.7% to US\$9484.50/t a week ago, marking a significant milestone for the metal. This follows a rally of about 15% over the past two months, fuelled by disruptions at major mines, which have compelled smelters to pay historically elevated prices for mined ore. Concurrently, Chinese copper plants, responsible for over half of the world's refined copper, are considering joint output reductions in response. Additionally, investors are increasingly optimistic about the world's second-largest economy, evidenced by growth in China's manufacturing industry index at the end of March for the first time since September 2023...

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Project Blue | 15 Apr 2024

Japan investigates anti-dumping into Chinese graphite electrodes

Japan's Ministry of Economy, Trade and Industry (METI) and the Ministry of Finance (MOF) will initiate an anti-dumping investigation into graphite electrodes from China.

The decision to initiate an investigation follows a review by Japan's trade and finance ministries of an application received in February 2024 to impose anti-dumping duties from SEC Carbon, Tokai Carbon, and Nippon Carbon. The investigation will focus on Chinese suppliers, excluding regions in Hong Kong and Macao, and is expected to be concluded within one year...

Read More

Project Blue | 29 Apr 2024

What's next for Australian lithium?

It's no exaggeration to say lithium has had a rocky year, but could the tide be turning for the critical mineral? Australian Mining investigates.

The Federal Government's 'Resources and Energy Quarterly' (REQ) for March 2024 forecasts strong demand for lithium in the coming years as electric vehicles (EVs) become more widespread...

Read More

Australian Mining | 04 Apr 2024

Hancock Prospecting purchases stake in US Rare Earth producer MP Materials

Hancock Prospecting, owned by Australian billionaire Gina Reinhart, announced it has acquired a 5.3% stake holding, equating to 8.78M shares, in US-based rare earth miner and processor MP Materials. The stakeholding in MP Materials is the third rare earth company in which Hancock Prospecting has acquired a stake, with the company taking a 6.17% stake in Brazilian Rare Earths developing the Rocha de Rocha project in Brazil and a 9.14% holding in Arafura Rare Earths in Australia developing the Nolans project...

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Project Blue | 18 Apr 2024

African critical minerals output could reach \$2 trillion by 2050

Sub-Saharan Africa could produce almost \$2 trillion of metals required for the energy transition by 2050, according to the International Monetary Fund.

Global revenue from mining copper, cobalt, lithium and nickel could reach \$16 trillion in current dollar terms over the next quarter century under a demand scenario estimated by the International Energy Agency, the IMF said in a paper on Friday. Output from sub-Saharan Africa will account for about 12% of that total, according to the report...

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Mining.com | 19 Apr 2024



BIG PICTURE THINKING

April 1: Stellar locations to mine antimony and tungsten

Several distant planets in Starfield host antimony resources and there are 25 known planets and moons where antimony can be mined. Tungsten on the other hand is rarer in Starfield but critical for building heavy machinery and mining equipment. In order to support galactic outpost expansions it is important to get tungsten mining going.

The moon Voss of the gas-giant planet Olivas in the Alpha Centauri system is well endowed with a variety of resources, including water, lead, nickel, and even uranium. But tungsten claims the position as its most valuable resource...

[Read More](#)

Project Blue | 01 Apr 2024

\$270BN funding gap for critical minerals threatens energy transition, warns UNCTAD

UN Trade and Development (UNCTAD) has identified a significant shortfall in the amount of mining projects underway if the planet is to meet critical energy transition goals, consisting of over 250 large...

[Read More](#)

Mining Magazine (Subscription Required) | 29 Apr 2024

How to Develop a Critical Minerals Project: Our Top 5 Tips

At Core Resources, we've worked on critical minerals projects for more than 20 years, so we've learned there are many "critical aspects", differing them from more conventional base and precious metals projects such as copper or gold.

Obviously, with the global population increasing and the clean energy transition underway, the demand for critical minerals projects is on the rise. The critical minerals we specialise in include nickel, cobalt, vanadium, graphite, antimony and rare-earths, plus more. Here are our top 5 tips for how to develop a critical minerals project...

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Core Resources | -

Critical materials used in electronic components

- Solder:** Tin
- Resistors:** Ceramics
- Transistors:** Silicon
- Diode (+gas):** Tellurium, Zinc
- PCB Board:** Plastic
- Microprocessors:** Antimony, Cadmium, Hafnium, Indium, Tantalum, Titanium
- SMD capacitors:** Aluminium, Ceramics, Tantalum
- Connecting wire:** Copper
- Substrates:** Gallium, Germanium, Silicon

www.projectblue.com

How will the booming semiconductor market affect critical materials?

Semiconductor products include logic integrated circuits (ICs), analogue ICs, microprocessor and microcontroller ICs, and memories. Growth in demand for these products has been booming, underpinned chiefly by portable electronics trends.

Cell phone trends provide an illustrative example of why semiconductor demand is on the rise. Today's cell phones contain a vast array of microprocessors compared to the phones of twenty years ago. This is the result of numerous factors including consumer preferences for smaller handsets; enhanced safety requirements, and more sophisticated applications requiring more processing power...

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Project Blue | 16 Apr 2024

Calendar of events 2024

Do you know of an upcoming event that's not listed?
Email: admin@cmaustralia.org

APRIL 2024

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MAY 2024

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JUNE 2024

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JULY 2024

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AUGUST 2024

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SEPTEMBER 2024

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OCTOBER 2024

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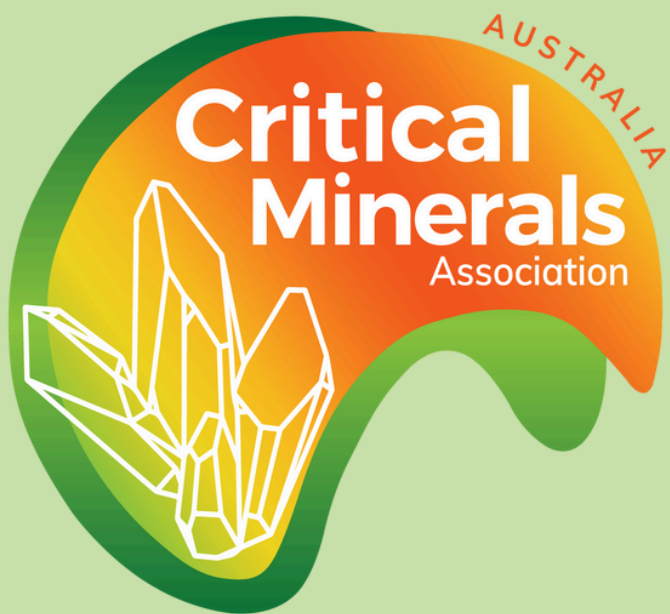
NOVEMBER 2024

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DECEMBER 2024

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	DATE(S)	EVENT	HOSTS/PARTNERS	LOCATION
APR	11 APR - 12 APR	Australia-Japan Energy Partnership Conference	AJBCC	Adelaide, AU
	16 APR - 17 APR	2024 Paydirt Battery Minerals Conference	Paydirt	Perth, AU
May	23 MAY - 24 MAY	Critical Minerals Forum - Tokyo 2024	Project Blue	Tokyo, JP
JUN	17 JUN - 18 JUN	Future of Mining Perth	Future of Mining	Perth, AU
	18 JUN - 19 JUN	Copper to the World	Austmine	Adelaide, AU
JUL	17 JUL - 19 JUL	Noosa Mining Investor Conference	Noosa Mining	Noosa, AU
AUG	5 AUG - 7 AUG	Diggers and Dealers	Diggers and Dealers Mining Forum	Kalgoorlie, AU
	13 AUG	Critical Minerals Forum - Perth 2024	Project Blue	Perth, AU
	26 AUG - 28 AUG	Aust CM Conference 2024	AusIMM	Brisbane, AU
SEP	11 SEP - 12 SEP	BENCHMARK - GIGA+ APAC 2024	Benchmark	Perth, AU
OCT	7 OCT - 8 OCT	Battery & Supply Chains 2024	IQ Hub	Perth, AU
	29 OCT - 31 OCT	IMARC	International Mining and Resources Conference	Sydney, AU
DEC	3 DEC - 5 DEC	Resourcing Tomorrow 2024	Mines and Money	London, UK



This Newsletter has been compiled by QUT researchers:

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Association Australia



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